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DEPARTMENT OF THE ARMY
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AGAM-P (M) (24 Jul 69) FOR OT UT 692222

1 August 1969

AD 503448

SUBJECT: Operational Report - Lessons Learned, Headquarters, 9th Infantry Division Artillery, Period Ending 30 April 1969 (U)

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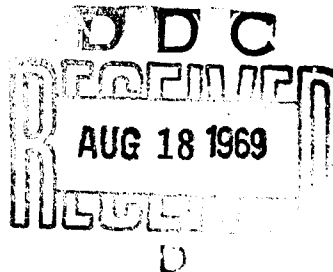
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9th Infantry Division Artillery

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30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/-CSFOR-65)
(UIC-WDF3-AA)(U)

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SECTION I

Significant Activities

1. (C) Introduction:

a. General.

(1) During the period 1 February thru 30 April 1969, Division Artillery continued to support the diverse and widely spread operations of the 9th Infantry Division. The brigades exploited helicopter mobility and night operations to eliminate the enemy in record numbers. The frequency of contacts with the enemy increased significantly over the last reporting period; however, the size of the contacts remained mostly with enemy squad and platoon sized elements. To support the far-ranging and dynamic tactics of the maneuver forces, the artillery habitually split batteries and displaced frequently. This was particularly applicable to operations in the 1st and 2nd Brigade areas where the absence of any non-divisional artillery necessitated many long duration (2-3 week) split battery operations, and unit displacements almost daily. The dry weather during the period did permit greater mobility and considerable flexibility in selection of firing

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1

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AVDE-AO

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/GSFOR-65)
(UIC-WDF3-AA)(U)

positions. There was no significant curtailment of maneuver operations due to the shortage of artillery fire units. Mobility, speed, and flexibility provided artillery support where and when it was needed.

(2) On the night of 22-23 February, the enemy initiated his Post-Tet Offensive, which was characterized by mortar and rocket attacks throughout the Division area. Since initiation of the offensive, population centers and base camps have been shelled periodically, but at a decreasing tempo. Overall casualties and damage have been relatively light. Even though stand-off attacks have been common, there has been no attempt to overrun a battery position. On the other hand, sapper attacks and ambushes have been more prevalent, particularly against the riverine artillery.

(3) Several organizational changes occurred during the reporting period. On 20 April, the 1st Battalion, 11th Artillery (1-11 Arty) was reorganized from riverine to standard TOE to provide the organizational structure required to accomplish its mission. On 14 April, the 264th Field Artillery Detachment (Radar), a TPS-25 radar detachment, arrived at Dong Tam, Republic of Viet Nam (RVN) from Fort Sill, Oklahoma. This unit was assigned to Headquarters and Headquarters Battery, 9th Infantry Division Artillery, where it underwent a training program assisted by Division Artillery's TPS-25 radar section. On 26 April, the Detachment was deployed to the field. The 6th Battalion, 77th Artillery (6-77 Arty), conducted "Operation Switch" which involved turnover of equipment to an Army of Viet Nam (ARVN) artillery unit. Ceremonies were conducted at Can Tho, RVN on 26 April 1969, to signify completion of the equipment turnover. Battery D, 2d, Battalion, 4th Artillery (2-4 Arty) was activated effective 20 February 1969. The battery was organized, equipped, and initial training accomplished at Can Tho, RVN under the auspices of the 6-77 Arty. On 19 April 1969, D/2-4 Arty arrived at Dong Tam, RVN where it was attached to 1-11 Arty. The Battery will remain with 1-11 Arty to provide support to the 1st Brigade, the only brigade in the Division with four maneuver battalions.

(4) Significant activities of the battalions are described in the following paragraphs.

b. 2nd Battalion, 4th Artillery. The battalion continued to support the 3rd Brigade in its Tactical Area of Interest (TAOI) of Long An Province. There were relatively few battery moves required during the period due to the one divisional and two non-divisional 155mm howitzer batteries located in Long An, and two II Field Force Artillery batteries located on the periphery of the Province. Brigade fire support bases and base camps were attacked intermittently by mortar and rocket fire during the Post-Tet offensive, and the enemy continued to use 107mm rockets in a direct fire role from ranges of 200 meters to 400 meters. Most of the contacts in the TAOI were with small enemy elements, but the Brigade did make contact with larger enemy elements in the Plain of Reeds. Btry A/1-84, continued in a reinforcing role throughout the period, while the two non-divisional 155mm batteries, Batteries B and C, 5-42 Arty provided General Support Reinforcing (GSR) fires. Battery A, 7-8 Arty (175mm/8")

CONFIDENTIAL

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CONFIDENTIAL

AFD-40

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF2-AA)(U)

located at Len Loc (XS6276) and Battery B, 7-9 Arty (105mm) located at Nha Be (XS9083) answered calls for fire whenever the situation warranted.

c. 1st Battalion, 11th Artillery. The Battalion continued its mission of direct support to the 1st Brigade in Dinh Tuong and Go Cong Provinces. The Brigade Tactical area of Interest (TAOI) became the center of Viet Cong activity in the Delta during this reporting period, with the 1st Brigade and its supporting units accounting for over three thousand enemy killed or captured. The Battalion was constantly moving and splitting in order to provide support for the maneuver elements, while at the same time providing fire support to Cong Tan Base also located in the 1st Brigade area. The Brigade operations often reached outside the TAOI into adjacent provinces to the North and West. These operations were the result of interdiction and spoiling operations by the Brigade. During this reporting period, batteries of the battalion were split 21 times for a total of 168 battery days. A number of these moves were tactical emergencies reacting to brigade contacts. Night Search operations, the integrated use of helicopter riflemen with starlight scopes, helicopter flare ships and gunships, have produced significant body count and applied tremendous pressure on the enemy's ability to move along commo-liaison routes during the hours of darkness. Battery B, 1st Battalion 84th Artillery (1-84 Arty) continued to provide General Support Reinforcing (GSR) fires to the 1-11 Arty and frequently operated in a split configuration. The attachment of D/2-4 Arty will alleviate the necessity to split batteries so often.

d. 3rd Battalion, 34th Artillery. As part of the Mobile Riverine Force (MRF) the Battalion continued to furnish direct support to the 2nd Brigade in Kien Hoa Province, and occasionally in adjacent provinces. Brigade operations were characterized by numerous air and water mobile assaults throughout its area, which proved highly successful in preempting any attempt by the enemy to mass for an attack in force. Batteries A and B continued to operate from barges, while Battery C continued operations on "paddy platforms" at Fire Support Base Klaw (XS6028). The threat to Ben Tre City, Dong Tam Base, and the District Towns, plus the need to displace frequently for security purposes, caused the barge mounted batteries to move continually in order to support the maneuver elements during the daylight hours and provide coverage for the cities and base camps at night. The enemy made a number of attempts to damage the barges and supporting watercraft during this period. On 8 March 1969, a command element had just completed occupation of a riverine fire support base when enemy sappers were detected in the water attempting to mine the boats. In the action that followed two sappers were killed and one captured. On 11 March 1969, a howitzer platoon from Battery B was moving along a canal in Mo Cay District when it was ambushed with B-40 rockets and automatic weapons fire. With support from escorting naval boats and gunships, the howitzer platoon fought its way out of the canal using beehive and white phosphorus ammunition. Battery C/1-84 Arty remained GSR to the 3-34 Arty throughout the period.

e. 6th Battalion, 77th Artillery. The Battalion remained assigned to the 54th Artillery Group, attached to the 9th Infantry Division, and under the operational control of the Senior Advisor, IV Corps Tactical Zone. The Battalion supported operations of the 9th and 21st ARVN Divisions and the 44th Special Tactical Zone in Chau Doc, Phong Dinh, and Kien Phong Provinces. During this period, a significant portion of the Battalion's operations took place in the

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AVDE-AO

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFC-65)
(UIC-WDF3-AA) (U)

Seven Mountains Area, Chau Doc Province, in support of the 5th Mobile Strike Force and the 4th ARVN Ranger Group, which had the mission to capture the hard-core enemy sanctuaries on Mt Nui Coto and Tup Chuk Knoll. Battery B/1-84 Arty was airlifted to this area on 17 March 1969 and its medium artillery together with the light artillery of the 6-77 Arty combined to provide overwhelming fire support that assisted in the ARVN's capture of these two longtime Viet Cong sanctuaries.

f. 1st Battalion, 84th Artillery. This battalion provided general support (GS) to the Division. Additionally, it continued to provide fire support coordination for the infantry battalion operating in AO Kudzu, the area surrounding Dong Tam Base Camp, and for the Division Support Command which is charged with perimeter and internal defense of Dong Tam Base. The Battalion also continued to operate the Dong Tam Air Warning Control Center. Batteries B and C (155mm towed) were GSR to the 1-11 Arty and 3-34 Arty, respectively, and Battery A (155mm self-propelled) reinforced the fires of 2-4 Arty. Battery D (8" self-propelled) operated from Dong Tam Base with a GS mission, periodically changing to GSR to the 1-11 Arty with two howitzers at Dong Tam, and two howitzers at Fire Support Base Moore (XS2650). The battery also displaced to Tan Tru (XS6562) with the mission of GSR to the 2-4 Arty for a one-day operation. Battery B spent more than half the period in split configuration. On 17 March 1969, Battery B airlifted three howitzers to VS 953485 (Seven Mountains Area) to reinforce the fires of the 6-77 Arty, which was supporting a Mobile Strike Force operating against the enemy on Nui Coto Mountain. The other three howitzers joined the battery on 20 March 1969 and remained there until 23 March 1969, when it was necessary to return them to provide support in the 1st Brigade area. The remaining three howitzers reinforced the 6-77 Arty until 9 April 1969.

g. Ammunition expenditures for the reporting period are shown at inclosure 1.

2. (C) Organization:

a. The artillery organization for combat on 30 April 1969 was:

<u>UNIT</u>	<u>LOCATION</u>	<u>MISSION</u>
2nd Bn, 4th Arty (-)	XS 5565	DS 3rd Brigade
Btry A, 1st Bn, 84th Arty	XS 6663	R 2nd Bn, 4th Arty
1st Bn, 11th Arty (+)	XS 4143	DS 1st Brigade
Btry D, 2nd Bn, 4th Arty	XS 4143	Attached 1st Bn, 11th Arty
Btry B, 1st Bn, 84th Arty	XS 2650	GSR 1st Bn, 11th Arty
3rd Bn, 34th Arty	XS 4143	DS 2nd Brigade
Btry C, 1st Bn, 84th Arty	XS 5132	GSR 3rd Bn, 34th Arty
Division Artillery	XS 4143	

4

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AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

30 April 1969

1st Bn, 84th Arty
Btry D, 1st Bn, 84th Arty

XS 4143
XS 4143

GS 9th Inf Div
GS 9th Inf Div

Non-Divisional Artillery

Btry B, 5th Bn, 42nd Arty

XS 8372

GSR 9th Inf Div Arty
(priority of fires to
2-4 Arty)

Btry C, 5th Bn, 42nd Arty

XS 5472

GSR 9th Inf Div Arty
(priority of fires to
2-4 Arty)

b. A roster of artillery commanders is shown at inclosure 2.

c. A list of permanent and semi-permanent fire support bases is at inclosure 3.

3. (C) Personnel & Administration:

a. During the period 1 February to 30 April 1969, the Division Artillery experienced a shortage of personnel in both basic and support specialties. At one point, due to the low input of new personnel, the overall strength was only 93 percent, which is below minimum operating standards. Some improvement was gained by the temporary assignment of infantry personnel to fill vacancies in basic artillery positions. However, the shortages were satisfactorily reduced by transferring personnel from the 6th Bn, 77th Arty, which was in the process of inactivation, and the infantry personnel were either returned to their units or lost through normal rotation.

b. Units of Division Artillery are not receiving sufficient numbers of trained Supply Specialists (76Y), Automotive Repair Parts Specialists (76S), and Maintenance Data Specialists (71T). In particular, an acute shortage of Automotive Repair Parts Specialists exists. In order to maintain effective supply and maintenance operations, units must conduct on-the-job training programs on a continuing basis. This practice is both time-consuming and places a burden on the few trained personnel available. Consequently, the overall efficiency of the unit supply and maintenance system was reduced.

c. Personnel strength as of 30 April 1969.

	<u>Authorized</u>	<u>Assigned</u>
Officers	229	231
Enlisted	2177	2140

d. Other than the shortages listed in paragraph b above and the shortage of personnel caused by the inadequacy of the riverine TOE which has been documented

5
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AVDE-AO

30 April 1969

SCF-JRCT Operational Report for the Period Ending 30 April 1969, (RCS/CSFCR-65)
(UIC-WDF3-AA)(U)

In previous reports, the Division Artillery did not experience any severe MOS shortages during the reporting period. Shortages were reported in 13A10 and 36K20 MOS's although these vacancies are being adequately filled by enlisted men with 13B40 and 36K40 MOS'sⁱⁿ which an overage is shown due to stepped-up promotions.

4. (C) Intelligence. During the reporting period command emphasis was given to battalion intelligence gathering and analysis, primarily to improve target acquisition. Turnover of intelligence officers during the period presented an opportunity to have each of the new officers attend the Division-sponsored S2 Orientation Course. This seven day course was useful in providing the new intelligence officers with an understanding of the Division information gathering and evaluation process. Because of this renewed interest and improved educational program, the battalion intelligence officers, on their own initiative, began more extensive and intensive exploitation of information sources at village, district, and province level, to include ARVN forces, US Advisors and Special Forces. The contacts made increased the flow of information which, after being recorded, evaluated, and interpreted, has provided useful intelligence. This intelligence also has been passed to the Brigade Intelligence Officers and, through a joint effort, appropriate action has been taken to engage targets developed. The overall results of this renewed emphasis has been increased target acquisition, more timely intelligence, and improved ability to pinpoint enemy base areas and communication routes.

5. (C) Training.

a. The Division Artillery gunnery contact team, consisting of two Division Artillery staff officers, has been making visits to each of the Division Artillery firing batteries at least once a month. As a result of these visits, the firing batteries have shown a significant improvement in firing battery and fire direction techniques, and the double check system.

b. During this reporting period, training has been given to the ground surveillance radar operators to improve their abilities in distinguishing between personnel, ripe palm, and domestic animals. Through the use of aerial observers, targets are passed to the operators and their evaluation of the sensing is passed back to the aerial observer, thereby improving operator ability to distinguish active personnel movement. Additionally, training has been conducted to improve the AN/TPS-25 radar operators' ability to adjust impacting artillery. Registrations, observed concurrently by the radar and an aerial observer, have shown that the AN/TPS-25 radar can be quite accurate in adjusting artillery fire.

6. (U) Logistics:

a. A problem developed in the area of meteorological expendable supply items. Because of the delay in receiving supplies from the depot the normal 30 day supply of expendables is not sufficient to sustain continuous operations. The average time involved in receiving expendables using an O5 priority is 120 days. In order to offset these supply delays and preclude downtime, the metro section has

CONFIDENTIAL

AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-1A) (U)

30 April 1969

increased its authorized stockage level (ASL) and plans to carry a 120 day stockage until supplies become readily available. Items that fall into this category are:

Nomenclature

FSN

Chart ML 574A	6660-926-2285
Charge Hydrogen generator ML 305A	6660-999-0743
Charge hydrogen generator ML 587	6660-999-0743
Balloon ML 537	6660-892-1718
Balloon ML 541	6660-892-2342
Radiosonde AN/AMT-4D	6660-542-7964

b. The Division Artillery experienced some problems on the availability of repair parts for 3KW 400 cycle generators for FADAC. On occasion, as many as eight generators have been deadlined for repair parts, especially unservicable stators and rotors. These parts have been reported as short in the supply system. Sometimes units have had only one generator per FADAC, which decreases FADAC utilization.

c. Headquarters and Headquarters Battery, Division Artillery is authorized an M36 Radar Chronograph, which was received on 25 October 1968. The TOE does not authorize a 0.5 KW, 115 Volt, 400, cycle generator, FSN 6115-577-8123, the normal power source for this chronograph. This situation necessitates the use of one of a limited number of available FADAC generators.

7. (U) Civic Action. The Division Artillery civic action program continued to be active throughout the period with a total of 21,786 patients treated on 213 visits to civilian communities by civic action teams. Large amounts of building construction material along with medical and school supplies were distributed in an attempt to cement loyalty to the Saigon government. Information gathered from the teams' visits proved reliable and was integrated into the overall intelligence collection effort. The civic action program is summarized in tabular form at Inclosure 4.

SECTION II

Commander's Observations, Evaluations, and Recommendations

1. (U) Personnel.

7

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AVDS-40

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-55)
(UIC-WDF3-AA)(U)

Observation: There is a shortage of trained radar operators within the Division Artillery.

Evaluation: The 9th Division Artillery operates two AN/TPS-25, three AN/MPQ-4 and two AN/TPS-33 radars. Approximately 50% of the personnel currently manning these radars are not school trained. Since operation of the radars is critical to the Division, personnel with other MOS's must be diverted and retrained as radar operators. Experience has shown that it requires about one month to train an operator to the point where he can perform his duties without continuous supervision.

Recommendation: That the Field Artillery School increase the output of MOS 17B to provide more trained operators in the replacement stream.

2. (C) Operations.

a. "Artillery Dawn Patrol".

Observation: A one month test of early morning aerial recon of previous nights firing was conducted by Division Artillery using a Light Observation Helicopter (LOH).

Evaluation: The early morning aerial recon should always be escorted by an armed helicopter. Depending on the area and number of targets to be reconed, the choice of flying route must be carefully planned; however, visual recon should be directed to the most significant targets first. The actual recon of a target should involve a high altitude orbit and a low level pass starting about one kilometer out from the target location. The high level orbit over the target gives the observers an opportunity to observe the target area with binoculars. The low-level pass allows the observers to recon the specific target grid with the naked eye, and to fly slowly or even hover if armed helicopter cover is available. If the visual recon begins before BMNT plus 30 minutes, the observers will have difficulty distinguishing between fresh craters and old, fresh trails and old, and bodies and lumps of dirt, due to dim light and ground mist. During the conduct of this test, very few worthwhile results were obtained. The hazards involved are inherent with a low pass over any unsecure area, particularly if armed helicopter escort is not available.

Recommendation: That the use of an "Artillery Dawn Patrol" be limited to only extremely significant targets that have been fired during the night, and then only when adequate armed escort is provided.

b. "Firecracker Flash"

Observation: A one week test of flying aerial recon of ICM being fired

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AVDE-AO

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

in coordination with illumination was conducted during the reporting period.

Evaluation: Using targets acquired by the ground surveillance radars, "Firecracker" ammunition in coordination with illumination was visually reconned using a LOH, in an effort to acquire surveillance of ICM fires. In order to obtain maximum results, the ICM and illumination should arrive on target simultaneously, with the visual recon arriving over the target moments after the ICM impacts. Due to the area coverage provided by the ICM, the low-level pass must start from at least two kilometers out from the target grid allowing the enemy more time to react and diminishing the effectiveness of the recon. The low-level run must be flown straight and level in order for the observers to discern forms or movement. The results of these tests were negative.

Recommendation: That the employment of the "Firecracker Flash" be reserved for only extremely large and reliable targets and then only when escorted by armed helicopters.

c. "Gaslight"

Observation: During the reporting period tests were made using CS in coordination with HE fuze VT, illumination, and an aerial recon.

Evaluation: Theoretically, the CS should be fired first followed by the HE-VT to catch any enemy that have been driven from their bunkers by the gas. However, the prevalence of protective masks on dead and captured enemy and the enemy's reputation for individual discipline make it unlikely that this tactic will work. Rather, the CS, HE-VT, and illumination should all impact simultaneously to maximize confusion. In order to avoid the billowing CS, the low level reconnaissance must be higher than one hundred feet and should start approximately one kilometer out. Once again, the pass must be straight and level using the naked eye to discern forms or movement. The CS appears to be very effective, spreading quickly and collecting in streams and shell holes.

Recommendation: That this technique be used on large, accurately located targets, since it is hazardous and in the test yielded negative results. Further testing should be conducted.

d. Simultaneous observation for radar orientation.

Observation: Simultaneous observation is an excellent method of obtaining directional data for ground surveillance radars.

Evaluation: It is fairly common practice to orient AN/PPS-5 and AN/TPS-33 radars with either the M2 compass or the M2 aiming circle. These radars are normally distributed throughout the division area, and are moved quite frequently; therefore, extension of survey control is not practical in

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AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CFOR-65)
(UIC-WDF3-AA)(U)

30 April 1969

most cases. The radars are frequently located in outposts and secure villages where metallic objects are very common. Misorientation of magnetic instruments can be expected. A check of directional orientation with simultaneous observation in one brigade area, revealed that all radars were misoriented, one by 58 mils. Since artillery fire on radar acquired targets is normally unobserved, it is imperative that the greatest possible accuracy be obtained.

Recommendation: That whenever possible, aiming circle directional data used to orient ground surveillance radars be obtained by simultaneous observation.

e. Optimum meteorological balloon release time.

Observation: Meteorological balloon release times should be examined to insure validity of weather sampling.

Evaluation: During the month of March, the meteorological section, HHR, 9th Inf Div Arty, conducted a survey of the meteorological conditions in the Dong Tam Area. The results of this survey indicated that the established times for sounding the atmosphere were not optimum. II Field Force Vietnam Artillery was advised of this and allowed a change in the time scheduled for sounding the atmosphere. The survey indicated that the 0800 hour metro message was being prepared from data taken just prior to the morning transition period. The balloon was being released at 0630 at which time metro nighttime conditions still existed. When the met message was broadcast at 0800, the sun had risen, drastically changing temperature, density and wind data. By changing the sounding schedule to move the balloon release time to the end of the transition period, more valid met messages are obtained.

Recommendation: That metro stations adjust balloon release times to avoid transition periods.

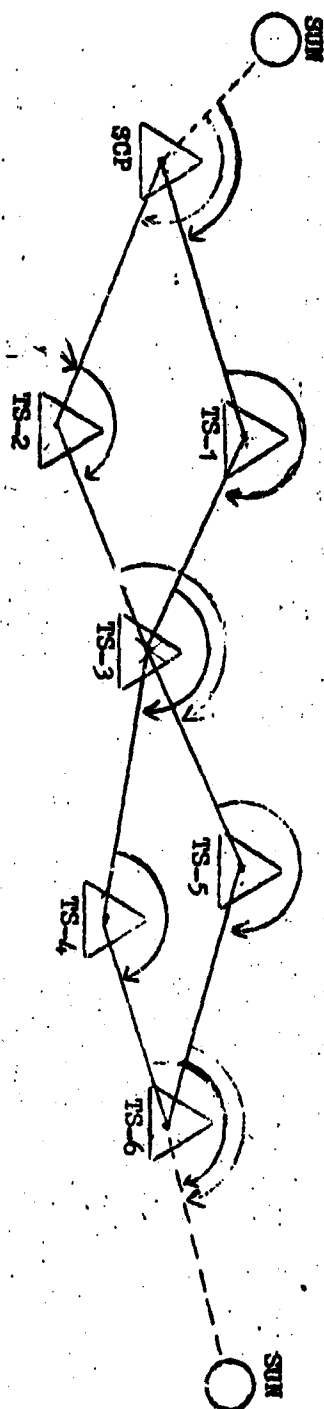
f. The "Diamond Traverse".

Observation: Fourth order survey control can be extended over flat terrain in unsecure areas by using the "Diamond Traverse" system.

Evaluation: Due to the flatness of the Mekong Delta Terrain, and the profusion of tree lines, rapid extension of survey control is limited to short, line of sight legs. Fourth order or higher survey control points (SCP) are widely spaced and sometimes unreliable. The lack of security available to survey teams makes it undesirable to start on a survey control point, move through an area, and then close back to the same point. The Diamond survey method starts from a known point and from this known point a traverse station (TS 1) is established (see figure 1). From the

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DIAMOND TRAVERSE

FIGURE 1

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AVDE-AO

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

same SCP, another traverse station (TS 2) is established to the side of TS 1. Then from TS 1 and TS 2, a common station (TS 3) is established. Computations should agree on the coordinates of TS 3. Then, using TS 1 as one back station, another forward station (TS-4) is established. Similarly, using TS 2 as a back station, another forward station (TS 5) is established. The survey is continued in this manner. Essentially, one traverse is conducted on one side of a road, and a separate traverse is conducted on the other side, both surveys occupying the same point, every third traverse station. The primary advantage of using the Diamond traverse is the time saved by not having to travel to the ultimate destination, and then survey back to the starting point. It also simplifies arrangements for security of the survey crews. Time taken to survey to the destination point is increased, due to the necessity of occupying four stations rather than two, but this is offset by not having to travel the same route twice. Since every fourth point is closed, and an astronomic azimuth is taken at the last traverse station, fourth order survey can be carried using this method.

Recommendation: That units conducting fourth order survey through unsecure flat terrain, use the "Diamond Traverse" method (figure 1).

g. Portable wooden radar towers.

Observation: Prefabricated, helicopter portable, wooden towers can be used to elevate AN/PPS-5 radars.

Evaluation: Initially, AB 216 and AB 585 signal towers were used to elevate AN/PPS-5 radars to a height of 30 feet to improve their effectiveness. These signal towers are light, collapsible and readily transported by UH-1D helicopter. They are, however, in short supply and very difficult to obtain. When additional radars were issued to the Division, there were insufficient towers available to meet the requirement. With engineer assistance, plans for wooden towers were prepared, and the 15th Engineer Battalion fabricated 18 complete towers (two sections each) to be used within the 9th Infantry Division TAOI. Each of the two sections making up the tower is 15 feet tall with the lower section six feet square, and the upper section four feet square. The base section is lifted out by helicopter to a site, then the upper section is lifted and placed on top. The two sections are nailed together to provide a stable platform.

Recommendation: That units experiencing shortage of signal towers, fabricate portable wooden towers to provide an adequate radar platform.

h. AN/MPQ-4 radar tower-bunker.

Observation: The use of AN/MPQ-4 radar tower-bunkers provides crew protection and should assist in exploiting the capability of the low angle modification.

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AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

30 April 1969

Evaluation: Countermortar radar crews are required to operate the radar throughout mortar attacks; therefore, provision must be made to protect the crew. Since the low angle modification has been made to the AN/MPQ-4 radar, they should be placed 10-12 feet above ground level to observe low angle rounds. This can be best done by building a tower-bunker and emplacing the radar on top of the bunker. At present, one radar tower-bunker is constructed, one is under construction, and one is projected. Effectiveness of the low angle modification has not yet been tested from an elevated position.

Recommendation: That other units employing the AN/MPQ-4 radar use the tower-bunker system to provide personnel protection and required elevation for the low angle modification.

1. Backup and check of FADAC.

Observation: Data for an accurate backup and check of FADAC can be determined from FADAC.

Evaluation: Graphical Firing Table (GFT) settings approaching the accuracy of FADAC data can be derived from FADAC by storing a series of targets at the optimum range for each charge on azimuths 800 mils apart. After current weapon, ammunition, meteorological, and registration correction information has been stored, each target is recalled and data computed. From the data displayed, a deflection correction and adjusted time and quadrant elevation are determined and entered on a GFT setting chart. When a mission is received, the appropriate setting is placed on the GFT and data computed to the target based on chart range and deflection. Simultaneously, FADAC firing data is determined. The deflections and quadrant elevations should agree within one mil and the fuze settings within 0.1 increments of time. In the event of FADAC failure, the GFT settings are used to deliver accurate fire until such time as any input parameter changes.

Recommendation: That other artillery units use this method as a backup check to the determination of firing data by FADAC.

3. (U) Organization and Training.

a. M36 radar chronograph section.

Observation: There is a definite need to reorganize the chronograph personnel and equipment into an operational section.

Evaluation: The M36 radar chronograph is assigned to the Target Acquisition Platoon Headquarters. Two personnel are authorized to operate the equipment; however, a vehicle is not authorized. In practice the

CONFIDENTIAL

CONFIDENTIAL

AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

30 April 1969

chronograph team works for the S3 who has primary interest in its operations and employment. Additionally, due to the far ranging and independent operation of the team, an NCO in charge is essential. In the 9th Div Arty a separate section under the Operations and FDC Section has been formed. The chronograph, two operators, 3/4 ton truck, generator, and radio is provided by the Target Acquisition Platoon. An FDC NCO is provided by the Operations and FDC section. This arrangement provides for proper supervision and unity of effort.

Recommendation: That units experiencing problems in chronograph employment consider formation of a separate section. A recommendation for change to the MTOE is being prepared.

b. Training of snipers in the adjustment of artillery fire.

Observation: The effectiveness of snipers is significantly enhanced when they are trained in the adjustment of artillery fire.

Evaluation: Aggressive employment of snipers often leads to situations where artillery fire is the best method of attacking the enemy force. Examples are when the force is too large, too far away, or cover is readily available after the first few rounds have alerted the enemy to the presence of US snipers. The 1st Battalion, 11th Artillery conducts four hours of training in the adjustment of artillery for soldiers attending the 9th Infantry Division Sniper School. Instruction includes classroom and practical work covering the principles of artillery fire, the call for fire, minimum safe distances, significance of the gun-target line relative to the location of friendly forces, the types of artillery available and practice fire missions. The value of this training is attested by more than twenty-five confirmed kills from artillery fire adjusted by graduates of the 9th Infantry Division Sniper School.

Recommendation: That snipers be trained in the adjustment of artillery fire.

4. (C) Intelligence. Integrated Civic Action Program (ICAP).

Observation: The flow of information obtained during ICAPs increase when the local Vietnamese officials do the questioning.

Evaluation: An ICAP is a coordinated combined activity composed of civic action, intelligence, psyop, and security personnel, each performing their customary roles in a contested or insecure area. During the course of conducting ICAPs, it was discovered that the enemy was discouraging Vietnamese civilians from attending ICAPs by threats and overt actions. The enemy was opposed to the villagers' being questioned by Americans. To counter the opposition and not openly jeopardize the villagers, it was decided to change the method of questioning. In conference with local officials it was determined that the village security chief could assist in questioning the villagers

CONFIDENTIAL

CONFIDENTIAL

AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

30 April 1969

without having the Americans obviously asking questions at an ICAP. This new approach increased the number of villagers attending ICAPs, the enemy eased their pressure, and the flow of information increased. Prior to conducting an ICAP, the S2/S5 provides the village security chief with Essential Elements of Information (EEI). The village security chief then instructs his assistants who will attend the ICAP. The assistants mingle with the villagers, unobtrusively questioning them about enemy activity. Should a villager appear to be unusually knowledgeable about the EEI, he is discreetly brought to the security chief for a thorough interrogation. As the ICAP team completes its activities, the security chief answers those questions of the EEI on which he has received information. The security chief is then given a general list of EEI to collect prior to the next ICAP.

Recommendation: That other units employ village security chiefs to improve the information flow from ICAPs.

5. (C) Logistics.

a. M36 Radar Chronograph repair.

Observation: The M36 radar chronograph was issued to Headquarters Battery 9th Inf Div Arty on 25 October 1968. Since that date an excessive amount of non-operational time has been accumulated.

Evaluation: Training of maintenance personnel at the direct support maintenance level was not conducted prior to the issue of the equipment. No distribution of maintenance manuals was made to the direct support maintenance battalion nor was there an initial issue of repair parts peculiar to the radar chronograph. This combination of events has resulted in an unacceptably low number of available days for the equipment.

Recommendation: When a new item of electronic equipment is phased into the Army, initial distribution kits or packages should be prepared for issue to the organizations providing direct support maintenance.

b. Radar Generators.

Observation: PU422 and 3KW, 400 cycle (FADAC) generators should be rotated frequently to avoid engine failure.

Evaluation: An excessive number of PU422 and 3KW, 400 cycle (FADAC) generators used by radar sections became unserviceable due to generator engine failures. This problem has been eased by requiring that two generators be available, and that these generators be alternated every four hours. The frequency with which PU422 generator engines failed reached alarming proportions in January and February. It was discovered that although two generators were on site, they were rotated on a 12 hour basis. Since the

CONFIDENTIAL

CONFIDENTIAL

AVDE-AO

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

engine is air cooled, and carbon tends to build up quickly on an over-heating engine, command emphasis was placed on rotating generators every four hours. Since this program was initiated, engine failure has dropped significantly. As this system proved effective for the PU422 generator, it was directed that the AN/TPS-25 radar section also rotate its FADAC generators every four hours.

Recommendation: That units employing these generators rotate them frequently to avoid engine failure.

d. Maintenance of AN/PPS-5 radars.

Observation: Units are not authorized all required parts to make repairs authorized at their echelon of maintenance.

Evaluation: Organizational maintenance is authorized to replace all of the exterior controls on the AN/PPS-5 radar set. All levers, knobs, and hand wheels can be requisitioned by the using unit from the technical manual. These controls, however, are issued without set screws. The set-screws are in the 35P manual and are not authorized for issuance to organizational maintenance level. When controls fall off, the screws are normally lost and the controls cannot be replaced by organizational maintenance due to the lack of set screws.

Recommendation: That units be authorized the set screws required to accomplish replacement of the controls. An equipment improvement recommendation has been submitted to the Electronics Command.

e. Fabricated Night Lighting Devices.

Observation: Due to a shortage in night lighting devices, repair parts and BA-30 batteries, many firing batteries are fabricating night lighting devices for aiming posts and collimators.

Evaluation: Each howitzer section requires eight BA-30 batteries nightly to operate its two sets of aiming posts. With a total of 48, BA-30 batteries being used per night by each battery, a strain on the supply system has resulted causing a shortage of BA-30 batteries. Additionally, the requirement for two sets of night lighting devices for aiming posts and/or collimators has caused a shortage of these devices and repair parts. In order to provide the required lighting, units have been fabricating night lighting devices using military flashlight components wired to BA-200 batteries located with the howitzer section. This improvisation has provided the light needed and also has conserved batteries by allowing the howitzer section personnel to turn the lights on and off from their location. Under normal conditions a BA-200 battery will last two to three weeks.

CONFIDENTIAL

AVDE-AO

30 April 1969

SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/CSFOR-65)
(UIC-WDF3-AA)(U)

Recommendation: That this solution be used by other artillery units experiencing this problem.

f. Fan belts for M110 Howitzer.

Observation: Issue fan belts for the M110 howitzer, even with proper tension on the fan tensioner, have a tendency to twist during operation resulting in a high breakage rate.

Evaluation: 100 amp generator belts, FSN 3030-517-0828, from the 3/4 ton truck have been used in place of the issue belts for several months now resulting in a greatly reduced breakage rate. The 3/4 ton generator belts are slightly longer than the issue belts but the additional length can be taken up by the fan tensioner. The main improvement is that the 3/4 ton generator belts are narrower which enables them to ride deeper in the pulley grooves thereby virtually eliminating any possibility of twisting.

Recommendation: That 100 amp generator belts, FSN 3030-517-0828, from the 3/4 ton truck be used in place of the issue fan belts on the M110 howitzer.

6. (U) Other. None

Incl

R. G. Gard, Jr.
R. G. GARD, JR
Colonel, Field Artillery
Commanding

1 - Record of Ammo Expenditures

~~2 - Commanders of Artillery Units~~

~~3 - Permanent and Semipermanent Fire Support Bases~~

~~4 - Civic Action Program~~

Incl 2, 3 and 4 wd Hq, DA

Copies Furnished:

Commanding Officer, 2d Bn, 4th Arty, APO SF 96370

Commanding Officer, 1st Bn, 11th Arty, APO SF 96370

Commanding Officer, 3d Bn, 34th Arty APO SF 96370

Commanding Officer, 1st Bn, 84th Arty, APO SF 96370

Commandant, The Field Artillery School, Ft Sill, Oklahoma 73503

AVDE-MH (30 April 69) 1st Ind

SUBJECT: Operational Report of 9th Infantry Division Artillery for
Period Ending 30 April 1969, RSCSOFOR-65 (R1) (U)

Headquarters, 9th Infantry Division, APO San Francisco 96370 26 May 1969

TO: Commanding General, II Field Force Vietnam, ATTN: AVFBC-RE-H,
APO 96222

1. This headquarters has reviewed and concurs with the Operational Report-Lessons Learned from Headquarters, 9th Infantry Division Artillery for the period ending 30 April 1969.

2. Reference paragraph 6, Logistics, of basic correspondence: obtaining meteorological items as indicated has been a problem; however, radiosondes are now becoming available.

FOR THE COMMANDER:



IRA A. HUNT, JR
COL, GS
Chief of Staff

AVFBC-RE-H (30 April 1969) 2nd Ind
SUBJECT: Operational Report for the Period Ending 30 April 1969, (RCS/
-CSFOR-65) (UIC-WDF3-AA) (U)

DA, HQ II FFORCEV, APO San Francisco 96266 10 JUN 1969

THRU: Commanding General, US Army Vietnam, ATTN: AVHGC(DST), APO 96375

Commander-In-Chief, US Army Pacific, ATTN: GFOP-DT, APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D.C. 20310

This headquarters has reviewed and concurs with the Operational Report -
Lessons Learned of the 9th Infantry Division Artillery for the period
ending 30 April 1969, as indorsed.

FOR THE COMMANDER:



B. G. MACDONALD
1LT, AGC
Assl AG

AVHGC-DST (30 April 1969) 3d Ind
SUBJECT: Operational Report for the Period Ending 30 April 1969,
(RCS/-CSFOR-65) (UIC-WDF3-AA) (U)

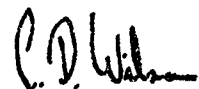
HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 963752 6 JUN 1969

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT,
APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 30 April 1969 from Headquarters, 9th Infantry Division Artillery.

2. Reference item concerning M36 Radar Chronograph repair, section II, page 15, paragraph 5a; concur. Although training for operators and support maintenance personnel was conducted in RVN prior to deployment of the Chronograph, no repair parts, other than running spares and accessories, were issued. Demand data has since been collected and stocks of repair parts have been accumulated. The problem has been brought to the attention of customer assistance office Vietnam (CAO-V). It was emphasized that future deployment of items of any new equipment should include concurrent repair parts packages. No further action required at this or higher headquarters.

FOR THE COMMANDER:



C. D. WILSON
1LT, AGC
Assistant Adjutant General

Cy furn:
9th Inf Div Arty
II FFV


GPOP-DT (30 Apr 69) 4th Ind (U)
SUBJECT: Operational Report of HQ, 9th Infantry Division Artillery for
Period Ending 30 April 1969, RCS CSFOR-65 (R1) (U)

HQ, US Army, Pacific, APO San Francisco 96558 10 JUL 69

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding indorse-
ments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:


C. L. SHORTT
CPT, AGC
AM AG

CONFIDENTIAL

AVDE-40

Inclosure 1 to Operational Report for the Period Ending 30 April 1969, (RCS/-CSFOR-65) (UIC-WDF3-AA) (U)

1. Missions fired and rounds expended are indicated by category of target in table 1.

2. Targets are categorized in the following classifications:

a. Confirmed: Location is known and presence of enemy determined by contact or by observation of activity by air or ground observers. Includes hard targets such as bunker complexes.

b. Acquired: Location is based on SIAR, SPARS, Red Haze, ground surveillance radar, airborne personnel detectors and other detection devices. Fires are based on timely reaction and meet all of the following conditions:

- (1) Detection by one or more of above sensory devices.
- (2) Validation by analysis of enemy pattern of operations.
- (3) Terrain analysis by competent targeting agencies.

c. Counterbattery: Known or suspect locations fired on immediately before, during, or immediately after enemy rocket/mortar/artillery attacks.

d. Preparations: Fires placed on LZ's, beachheads and objectives or areas prior to air assault or occupation by friendly forces. Includes reconnaissance by fire and blocking missions.

e. Interdiction: Fires delivered for the purpose of denying the enemy the use of an area or point. Includes targets fired as a result of agent reports which are not sufficiently reliable to fall in the confirmed category.

f. Special Purpose: Registrations, marking missions, navigation missions, calibrations, adjustment of defensive concentrations, and illumination missions.

g. Others: Fires for training, demonstrations, service practice and other categories not listed.

h. ARVN Support: Fires placed on targets at the request of ARVN forces. These are also included in the target categories and the total.

3. Artillery fires delivered during the reporting period resulted in the following significant surveillance:

- a. Enemy Killed: 598
- b. Bunkers and military structures destroyed: 837
- c. Sampans destroyed: 36
- d. Secondary explosions observed: 132

Incl 1

22

CONFIDENTIAL

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Table 1. (Ammunition Expenditures) to Operational Report for Period Ending 30 April 1969, (RCS/CSFOR-65) (UIC-WDF3-AA) (U)

MONTH	UNIT	CAL	CONFIRMED		ACQUIRED		COUNT'BTRY		PREP		INTERDICT	
			MSNS	RDS	MSNS	RDS	MSNS	RDS	MSNS	RDS	MSNS	RDS
FEB	1-11	105	167	6749	348	3106	50	1101	17	441	45	658
MAR			192	4756	599	7280	47	1820	50	1566	18	393
APR			259	8530	422	4692	125	2087	31	703	94	1265
TOTAL			618	20035	1369	15078	222	5008	98	2710	157	2316
FEB	2-4	105	85	3222	251	5495	68	3066	23	1222	78	1957
MAR			127	4585	277	3743	47	1809	58	4386	92	724
APR			66	5373	159	3535	14	454	18	1221	38	1154
TOTAL			278	13180	687	12773	129	5329	99	6829	208	3835
FEB	3-34	105	173	6850	215	1676	100	2411	114	9022	110	1412
MAR			152	7456	346	3218	70	1676	135	6934	110	1337
APR			211	6021	458	5636	94	1534	157	7067	156	2206
TOTAL			536	20327	1019	10530	264	5621	406	23023	376	4955
FEB	6-77	105	174	3532	108	2583	21	373	26	4471	2150	17809
MAR			154	3543	80	1015	0	0	47	3156	1879	11093
APR			28	764	7	248	0	0	8	2579	345	2972
TOTAL			356	7839	195	3846	21	373	81	10206	4374	31874
FEB	1-84	155	85	1751	400	7302	95	2116	15	759	91	2598
MAR			42	1537	392	4248	59	1541	14	528	157	1549
APR			79	3140	654	6890	37	1460	25	1291	101	1589
TOTAL			206	6428	1446	18440	191	5117	54	2578	349	5736
FEB	1-84	8"	18	354	113	1248	169	691	0	0	0	0
MAR			14	199	118	638	146	660	0	0	2	20
APR			10	105	66	355	38	198	0	0	68	506
TOTAL			42	658	297	2241	353	1549	0	0	70	526

CONFIDENTIAL

Table 1. (Ammunition Expenditures) to Operational Report for Period Ending 30 April 1969, (RCS/CSFOR-65)(UIC-WDF3-AA)(U)

MONTH	UNIT	CAL	SP PURP		OTHER		TOTAL		ARVN SPT	
			MSNS	RDS	MSNS	RDS	MSNS	RDS	MSNS	RDS
FEB	1-11	105	210	2800	0	0	837	14855	39	135
MAR			152	3021	0	0	1058	18836	36	872
APR			347	3426	2	22	1280	20725	16	482
TOTAL			709	9247	2	22	3175	54416	61	1489
FEB	2-4	105	110	2604	0	0	615	17566	59	1362
MAR			105	2339	26	341	732	17927	30	1201
APR			87	2092	0	0	382	13829	10	373
TOTAL			302	7035	26	341	1729	49322	99	2936
FEB	3-34	105	217	2558	24	503	953	24432	24	523
MAR			222	3328	0	0	1035	23949	28	963
APR			163	2652	9	155	1248	25271	66	1411
TOTAL			602	8538	33	658	3236	73652	118	2897
FEB	6-77	105	39	442	0	0	2518	29210	2518	29210
MAR			39	347	0	0	2199	19154	2199	19154
APR			9	55	0	0	397	6618	397	6618
TOTAL			87	844	0	0	5114	54982	5114	54982
FEB	1-84	155	41	1611	0	0	727	16137	116	2159
MAR			145	2129	9	92	818	11624	195	2790
APR			115	1232	21	484	1032	16086	69	2241
TOTAL			301	4972	30	576	2577	43847	280	7190
FEB	1-84	8"	19	151	22	135	341	2579	0	0
MAR			26	238	6	26	312	1781	1	60
APR			19	124	45	84	246	1372	0	0
TOTAL			64	513	73	245	899	5732	1	60

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